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2611

Patent PD-202130 Customer No. 020991



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Ernest C. Chen, et al.:

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mail in an envelope addressed to:

Serial No.:

10/532,632

Filed:

April 25, 2005

For:

LOWER COMPLEXITY

LAYERED MODULATION

SIGNAL PROCESSOR

Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, VA

22313-1450, on the date below.

Georgann S. Grunebach

Typed-of printed name of person signing certificate

Group Art Unit:

2611

Examiner:

To be determined

Date: April 19, 2006

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

The references cited on the enclosed form PTO/SB/08A may be relevant or material to the examination of the above-identified patent application and are, therefore, submitted in compliance with the duty of disclosure defined in 37 CFR 1.56. It is respectfully requested that the references be considered and made of record in the application identified above.

This statement should be considered because it is being submitted before the mailing of a first Office action on the merits under 37 C.F.R. §1.97(b)(3). Accordingly, it is submitted that no fee is due in this matter.

However, if it is determined that any appropriate fee is due, the Commissioner is hereby authorized to charge Deposit Account No. 50-0383 of Hughes Electronics Corporation, El Segundo, California.

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This Information Disclosure Statement is not to be construed as a representation that a search has recently been made, that additional information material to the examination of this application does not exist, or that this citation constitutes prior art.

Respectfully submitted,

n S. Grunebach, Reg. No. 33,179

The DIRECTV Group, Inc. RE/R11/A109 P. O. Box 956 El Segundo, CA 90245

Telephone No. (310) 964-4615

April 19, 2006



Co	mplete if Known
Application Number	10/532,632
I.A. Filing Date	October 10, 2003
371 (c) Date	April 25, 2005
First Named Inventor	Ernest Chen
Art Unit	2611
Examiner Name	To be determined
Attorney Docket Number	PD-202130
	Application Number I.A. Filing Date 371 (c) Date First Named Inventor Art Unit Examiner Name

	U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document Number Number-Kind Code	Publication Date MM-DD- YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		US-5,603,084	02-1997	Henry et al.	T	
	<u> </u>	US-6,389,002	05-2002	Schilling, Donald L.		
		US-6,178,158	01-2001	Suzuki et al.		
		US-6,731,700	05-2004	Yakhnich et al.		
		US-6,411,797	06-2002	Estinto, Eugene		
		US-2002/0071506	06-2002	Lindquist et al.		
	1	US-5,493,307	02-1996	Tsujimoto, Ichiro		
		US-5,956,373	09-1999	Goldston et al.		
	·	US-6,535,497	03-2003	Raith, Alex Krister		
		US-6,515,713	02-2003	Nam, Ho Jun		
		US-6,320,919	11-2001	Khayrallah et al.	:	
		US-3,974,449	08-1976	Falconer, David Duncan		
		US-3,879,664	04-175	Monsen, Peter		
		US-4,253,184	02-1981	Gitlin et al.	:	
		US-5,233,632	08-1993	Baum et al.		
		US-6,775,521	08-2004	Chen, Yue	·	
		US-3,878,468	04-1975	Falconer et al.		
		US-2004/0110467	06-2004	Wang, Arthur W.		
* *		US-6,535,801	03-2003	Geier et al.		
		US-6,325,332	12-2001	Cellier et al.		
		US-6,052,586	04-2000	Karabinis, Peter D.		
	<u> </u>	US-5,995,832	11-1999	Mallinckrodt, Albert J.		
		US-2005/008100	01-2005	Chen, Ernest C.		
		US-2002/176516	11-2002	Jeske et al.		
	ļ	US-6,304,594	10-2001	Salinger, Sheldon Norman		
		US-5,579,344	11-1996	Namekata, Minoru		
		US-5,121,414	06-1992	Levine et al.		
		US-6,144,708	11-2000	Maruyama, Hidenori		
L	<u> </u>	US-6,055,278	04-2000	Ho et al.		

Examiner Signature	Date
Oignature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line: through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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STATEMENT BY APPLICANT	First Named Inventor	Ernest Chen		
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Sheet 2 of 5	Attorney Docket Number	PD-202130		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document Number Number-Kind Code	Publication Date MM-DD- YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	Υ	US-6,330,336	12-2001	Kasama, Minoru	T
	 	US-6,718,184	04-2004	Aiken et al.	·
		US-5,819,157	10-1998	Ben-Efraim et al.	
		US-5,999,793	12-1999	Ben-Efraim et al.	· · · · · · · · · · · · · · · · · · ·
		US-6,297,691	10-2001	Anderson et al.	
		US-6,501,804	12-2002	Dietmar et al.	
		US-6,745,050	06-2004	Forsythe et al.	
		US-5,625,640	04-1997	Palmer et al.	
		US-6,597,750	07-2003	Knutson et al.	
		US-6,433,835	08-2002	Hartson et al.	
		US-4,800,573	01-1989	Cupo, Robert L.	
	ļ	US-6,266,534	07-2001	Raith et al.	
		US-5,467,197	11-1995	Hoff, Don G.	
		US-6,574,235	06-2003	Arslan et al.	
	 	US-5,430,770	07-1995	Abbey	
		US-5,966,412	10-1999	Ramaswamy	<u> </u>
		US-5,329,311	07-1994	Ward et al.	
	 	US-5,450,623	09-1995	Yokoyama et al.	
	 	US-5,966,186	10-1999	Shigihara et al.	
		US-6,028,894	02-2000	Oishi et al.	
	 	US-6,032,026	02-2000	Seki et al.	
		US-6,034,952	03-2000	Dohi et al.	:
<u> </u>		US-6,108,374	08-2000	Balachandran et al.	
	1	US-6,140,809	10-2000	Doi Daiacriandian et al.	
		US-6,219,095	04-2001	Zhang et al.	
	 	US-4,039,961	08-1977	Ishio et al.	:
		US-6,275,678	08-2001	Bethscheider et al.	
<u> </u>	1	US-3,383,598	05-1968	Sanders	
		US-5,577,087	11-1996	Furuya	

Examiner	Date	
Signature	Considered	
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	Examiner Name	To be determined		
Sheet 3 of 5	Attorney Docket Number	PD-202130		

U.S. PATENT DOCUMENTS					
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		Number-Kind Code	MM-DD- YYYY	- I pp. sam or onea besament	Relevant Passages or Relevant Figures Appear
,			-		
		US-5,602,868	02-1997	Wilson	:
		US-5,815,531	09-1998	Dent	
		US-5,960,040	09-1999	Cai et al.	
		US-6,987,068	11-1999	Cassia et al.	
		US-4,637,017	01-1987	Assal et al.	
		US-5,940,025	08-1999	Koehnke et al.	:
		US-5,870,443	02-1999	Rahnema, Moe	
		US-2003/0138037	07-2003	Kaku et al.	

		FO	REIGN PATE	NT DOCUMENTS		
Examiner Initials*	Cite No.	Foreign Patent Document Country Code-Number- Kind Code	Publication Date MM-DD- YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		EP 0929164	07-1999	Societe Europeene des Satellites	Пррси	+
		WO 02/073817	09-2002	Nokia Corporation		
		EP 0356096	02-1990	Meyers		
		EP 0238822	09-1987	NEC Corporation		
		WO 99/20001	04-1999	Silberger et al.		
		WO 01/80471	10-2001	DSPC Technologies, Ltd.		
		WO 03/105375	12-2003	Hughes Electronics Corporation		
		JP Publication 03139027	06-1991	Nippon Telegraph and Telephone Corporation	:	

Examiner Signature	Date Considered	

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NON PATENT LITERATURE DOCUMENTS				
Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when	T	
Initials*	No.	appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.),		
		date, page(s), volumne-issue number(s), publisher, city and/or country where published.		
		SALEH, A.A.M. et al.: "Adaptive Linearization of Power Amplifiers in Digital Radio		
		Systems", Bell System Technical Journal, American Telephone and Telegraph Co., New		
		York, US, Vol. 62, No. 4, Part 1, 1 April 1983 (1983-04-01), pages 1019-1033,		
		XP002028354		
		RAMCHANDRAN, KANNAN et al.: "Multiresolution Broadcast for Digital HDTV Using		
		Joint Source/Channel Coding, IEEE, Vol. 11, No. 1, January 1993, pp. 6-22		
		MEYR, HEINRICH et al.; "Digital Communication Receivers - Synchronization, Channel		
		Estimation, and Signal Processing"; John Wiley & Sons, Inc.; 1998; pages 212-213		
		and 217-218; XP 002364874		
		MEYR, HEINRICH et al.; "Digital Communication Receivers - Synchronization, Channel		
		Estimation, and Signal Processing"; John Wiley & Sons, Inc.; 1998; pages 610-612;		
		XP 002364876		

Examiner	Date	
Signature	Considered	i l
1		

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Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volumne-issue number(s), publisher, city and/or country where published.	Т
		FANG, T. et al.; "Fourth-Power Law Clock Recovery with Prefiltering", Proceedings of the International Conference on Communications (ICC), Geneva, May 23-26, 1993, New York, IEEE, US, Vol. 3, May 23, 1993, pages 811-815, XP010137089, ISBN:0-7803-0950-2, Section I, Introduction	
		JANSSEN, G.J.M; SLIMANE, S.B.: "Performance of a Multiuser Detector for M-PSK Signals Based on Successive Cancellation", ICC 2001, 2001 IEEE International Conference on Communications, Conference Record, Helsinky, Finland, June 11-14, 2001, XP010552960	
		SLIMANE, S.B.; JANSSEN, G.J.M.: "Power Optimization of M-PSK Cochannel Signals for a Narrowband Multiuser Detector", 2001 IEEE Pacific Rim Conference on Communications, Computer and Signal Processing, Victoria, B.C., Canada, August 26-28, 2001, XP010560334	
		SOONG, A.C.K.; KRZYMIEN, W.A.: "Performance of a Reference Symbol Assisted Multistage Successive Interference Cancelling Receiver in a Multicell CDMA Wireless System", Conference Record, Communication Theory Mini-Conference GlobeCom '95, IEEE Singapore 13-17 November 1995, XP010159490	
		ARSLAN, H; MOLNAR, K: "Iterative Co-channel Interference Cancellation in Narrowband Mobile Radio Systems", Emerging Technologies Symposium: Broadband, Wireless Internet Access, 2000 IEEE April 10-11, 2000, Piscataway, New Jersey, US, XP010538900	
		MAZZINI, GIANLUCA: "Power Division Multiple Access", Universal Personal Communications, 1998, ICUPC 1998, IEEE 1998, International Conference on Florence, Italy, 5-9 October 1998, New York, NY, US, IEEE, US 5 October 1998 (1998 10-5), pages 543-546, XP010314962 ISBN: 0-7803-5106-1	

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